

WHAT IS CLAIMED IS:

- 1 1. A composition for preventing or reducing skin aging and wrinkling, which
2 comprises at least one matrix metalloproteinase inhibitor (MMPI) and at least
3 one estrogen or phytoestrogen.
- 1 2. The composition according to claim 1 further comprising a cosmetically or
2 pharmaceutically acceptable topical carrier.
- 1 3. The composition according to claim 1 wherein said MMPI is Ilomastat.
- 1 4. The composition according to claim 1 wherein said estrogen or
2 phytoestrogens is a plant extract, a purified phytoestrogen, a synthetic
3 phytoestrogen, a natural estrogen, or a synthetic estrogen.
- 1 5. The composition according to claim 4 wherein the plant extract is black
2 cohosh extract.
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- 4 6. The composition according to claim 1 wherein the phytoestrogen is a
5 triterpenoid glycoside.
- 1 7. The composition according to claim 1 wherein the molar ratio of MMPI to
2 estrogen or phytoestrogens is between about 1000:1 to about 1:1000, 100:1 to
3 about 1:100, 10:1 to about 1:10, and about 1:1.
- 1 8. The composition according to claim 1 comprising a concentrations of about
2 10 ng/mL to about 100 mg/mL of the MMPI and estrogen or phytoestrogen.
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- 4 9. The composition according to claim 1 further comprising compounds active at
5 blocking UVA and UVB radiation.

- 1 10. A composition comprising Ilomostat and a triterpenoid glycoside in an
2 amount effective to treat, prevent, or reverse aging of skin.
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- 4 11. A composition comprising Ilomastat and a triterpenoid glycoside in an amount
5 effective to treat, prevent, or reverse photoaging of skin.
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- 7 12. A composition comprising Ilomastat and a triterpenoid glycoside in an amount
8 effective to treat, prevent or reverse smoking induced wrinkling and fine lines
9 in living human skin.
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- 1 13. A method for minimizing the adverse effects of aging on skin comprising
2 contacting said skin with (a) a matrix metalloproteinase inhibitor, MMPI, and
3 (b) an estrogen or phytoestrogen.
- 1 14. The method according to claim 13 wherein said contacting is conducted at
2 least once every twenty-four hours for the entire period during which said
3 minimizing of the adverse effects of aging on skin is conducted.
- 1 15. The method according to claim 13 wherein said contacting is conducted prior
2 to exposure to sunlight.
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- 4 16. The method according to claim 15 wherein said method further comprises
5 contacting the skin with compounds which block UVA and UVB.
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- 7 17. The method according to claim 13 wherein said contacting comprises
8 administering said MMPI and estrogen or phytoestrogen in a dermal
9 preparation.
- 1 18. The method according to claim 17 wherein said dermal preparation comprises
2 about 40% by weight of water; up to about 35% by weight, of a permeation
3 enhancing compound selected from the group consisting of dibutyl adipate,

4 isopropyl myristate and combinations thereof; up to about 15% by weight of a
5 fatty alcohol; and one or more emollients or moisturizing humectants.

1 19. The method according to claim 13 for treating wrinkling in post-menopausal
2 women.

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4 20. The method according to claim 13 for treating wrinkling in pre-menopausal
5 women.

1 21. The method according to claim 13 for treating wrinkling in men.

1 22. The method according to claim 13 which comprises repeatedly performing
2 said contacting over an extended period of time.

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1 23. A method for minimizing, treating, reversing or avoiding the adverse effects
2 of smoking or smoke exposure on skin comprising contacting said skin with
3 (a) a matrix metalloproteinase inhibitor, MMPI, and (b) an estrogen or
4 phytoestrogen.